

Title (en)
LIGHT EMITTING DEVICE

Title (de)
LICHTEMITTIERENDE VORRICHTUNG

Title (fr)
DISPOSITIF ÉLECTROLUMINESCENT

Publication
EP 4156311 A1 20230329 (EN)

Application
EP 22206870 A 20210629

Priority
• JP 2020113376 A 20200630
• EP 21182546 A 20210629

Abstract (en)
A light emitting device comprises one or a plurality of light emitting elements and a plurality of fluorescent materials, and emits a first light, a second light, and a third light from one or a plurality of light emitting elements and one or a plurality of fluorescent materials, wherein the first light has a correlated color temperature in a range of 1,500 K or more and 3,500 K or less, and has a color rendering index R9 of 50 or more, the second light has a correlated color temperature in a range of 3,500 K or more and 5,500 K or less, and has a color rendering index R9 of 50 or more, the third light has values of X and Y coordinates in the chromaticity diagram of the CIE1931 color system that are smaller than the values of X and Y coordinates at a color temperature of 5,500 K on the black body radiation locus, and a light having a correlated color temperature of 6,500 K has a color rendering index R9 of 50 or more and a melanopic ratio of 1.0 or more.

IPC 8 full level
H01L 33/50 (2010.01)

CPC (source: CN EP US)
F21V 9/45 (2018.02 - US); **H01L 25/0753** (2013.01 - CN); **H01L 33/502** (2013.01 - EP); **H01L 33/504** (2013.01 - CN EP);
H05B 45/20 (2020.01 - US); **F21Y 2113/10** (2016.08 - US); **Y02B 20/40** (2013.01 - EP)

Citation (applicant)
JP 2018511386 W

Citation (search report)
• [A] JP 2020098855 A 20200625 - CITIZEN WATCH CO LTD, et al
• [A] WO 2020043649 A1 20200305 - SIGNIFY HOLDING BV [NL]
• [A] US 10685941 B1 20200616 - LI YI-QUN [US], et al
• [A] US 2018077767 A1 20180315 - SOLER ROBERT [US], et al

Designated contracting state (EPC)
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DOCDB simple family (publication)
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JP 2023011822 A 20230124; JP 7174266 B2 20221117; JP 7445164 B2 20240307; US 11598508 B2 20230307; US 2021404632 A1 20211230;
US 2023243485 A1 20230803

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